

WHAT IS CLAIMED IS

1. A method for the manufacture of pipes of thermoplastics with transverse profile features, comprising mold segment halves (4, 5) which are circulated and, subsequent to an injection head (7), disposed in two lines opposite to each other, with the mold segment halves (4, 5) of a line not being interconnected, and which complement one another by twos along a straight molding path (2), forming a closed hollow mold;  
wherein each of the mold segment halves (4, 5) of a line is guided out of the molding path (2) at the downstream end (70) thereof and substantially at right angles to a direction of production (6) by means of a conveying device (29) and is re-circulated to the upstream end (67) of the molding path (2), where it is again inserted in the molding path (2) and attached to the respective mold segment half (4, 5) that leads in the direction of production (6);  
wherein downstream of the downstream end (70) of the molding path (2) and on both sides thereof, an additional first mold segment half (4a, 5a) is kept in a first parking position (77) for insertion in the molding path (2); and  
wherein at least one additional mold segment half (4b, 5b, 4c, 5c) is kept in at least one additional parking position (78, 79) between the first parking positions (77) for the first mold segment halves (4a, 5a) and the downstream end (70) of the molding path (2), these additional mold segment halves (4b, 5b, 4c, 5c) also being insertable in the molding path (2).
2. A method according to claim 1, wherein at least one further additional mold segment half (4b, 5b, 4c, 5c) is moved out of a path of displacement (85) of the first mold segment halves (4a, 5a), when the first mold segment

halves (4a, 5a) are moved from their first parking position (77) toward the molding path (2).

3. A method according to claim 1, wherein at least one further additional  
5 mold segment half (4b, 5b, 4c, 5c) is moved out of the path of displacement (85) of the first mold segment halves (4a, 5a), when the first mold segment halves (4a, 5a) are moved from the molding path (2) into the first parking position (77).
- 10 4. A method, according to claim 1, for the manufacture of pipes with in-line molded sockets (71), wherein the first mold segment halves (4a, 5a) and the further additional mold segment halves (4b, 5b, 4c, 5c) are inserted directly successively in the molding path (2) for molding a socket (71) on the pipe (68).
- 15 5. An apparatus for the manufacture of pipes of thermoplastics with transverse profile features, comprising mold segment halves (4, 5) which are circulated and, subsequent to an injection head (7), disposed in two lines opposite to each other, with the mold segment halves (4, 5) of a line not  
20 being interconnected, and which complement one another by twos along a straight molding path (2), forming a closed hollow mold;  
wherein each of the mold segment halves (4, 5) of a line is guided out of the molding path (2) at the downstream end (70) thereof and substantially at right angles to a direction of production (6) by means of a conveying  
25 device (29) and is re-circulated to the upstream end (67) of the molding path (2), where it is again inserted in the molding path (2) and attached to the respective mold segment half (4, 5) that leads in the direction of production (6);

wherein downstream of the downstream end (70) of the molding path (2) and on both sides thereof, provision is made for a first parking position (77) for an additional first mold segment half (4a, 5a) that is approachable by the conveying device (29); and

- 5 wherein, between the first parking positions (77) for the first mold segment halves (4a, 5a) and the downstream end (70) of the molding path (2), provision is made for at least one additional parking position (78, 79) for at least one further additional mold segment half (4b, 5b, 4c, 5c) that is also approachable by the conveying device (29).

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6. An apparatus according to claim 5, wherein the at least one further additional mold segment half (4b, 5b, 4c, 5c) is provided for removal, crosswise of the direction of production (6), from a path of displacement (85) of the respective first mold segment half (4a, 5a).

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7. An apparatus according to claim 6, wherein the at least one further parking position (78, 79) comprises carriages (81, 82) for lodgment of the further additional mold segment halves (4b, 5b, 4c, 5c).

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8. An apparatus according to claim 5, wherein the conveying device (29) is in the form of a gantry crane, comprising a conveying bridge (34) that is displaceable in the direction of production (6) and bridges the molding path (2);

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two conveying carriages (44, 45) that are disposed on the conveying bridge (34) and displaceable in opposite directions and crosswise of the direction of production (6); and a conveying arm (53) on each conveying carriage (44, 45), the conveying arm (53) being directed downwards toward the base (1) and having a holding device (54) for a respective mold segment half (4, 5).

9. An apparatus according to claim 7, wherein the carriages (81, 82) are movable on rails (83).

5 10. An apparatus according to claim 5, wherein the first parking positions (77) are stationary relative to the base (1).

11. An apparatus according to claim 5, wherein the parking positions (77, 78, 79) are raised as compared to the base (1).

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12. An apparatus according to claim 7, wherein the carriages (81, 82) are movable by linear drives (84).

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